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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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Hans Detampel

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EXAMINER

PAHNG, JASON Y

ART UNIT

PAPER NUMBER

3725

DATE MAILED: 09/22/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

09/982,489

Applicant(s)

DETAMPEL, HANS

Examiner

Jason Y. Pahng

Art Unit

3725

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 30 May 2006.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1,3-5 and 8-18 is/are pending in the application.
- 4a) Of the above claim(s) 5 and 12-18 is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1,3,4 and 8-11 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☒ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: \_\_\_\_\_

## **DETAILED ACTION**

### ***Continued Examination Under 37 CFR 1.114***

A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on May 30, 2006 has been entered.

### ***Priority***

It is acknowledged that Applicant will submit a certified copy of the priority document in due course. Applicant has not yet filed a certified copy of the application filed in Germany on October 17, 200 as required by 35 U.S.C. 119(b) at this time.

### ***Specification***

The amendment overcomes the specification objections made in the last Office action.

### ***Claim Objections***

The amendment overcomes the claim objections made in the last Office action.

With regard to claim 1, line 18, the phrase, "wherein the freezing means comprises", should be corrected to "wherein the first freezing means comprises" in order to avoid antecedent issues.

### ***Drawings***

The amendment overcomes the drawing objections made in the last Office action.

### ***Claim Rejections - 35 USC § 112***

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claims 1, 3, 4, and 8-11 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention as set forth in the last Office action and further described herein.

With regard to claim 1, what is "the material" in lines 7, 21, and 22? The material is not the same as the material in line 1. Is this the smaller material from the pre-classifying system or is this the larger material from the pre-classifying system?

With regard to claim 8, it is unclear what constitutes "material separated in the pre-classifying system" because there are more than one material separated in the pre-classifying system.

As set forth in the last Office action and repeated herein, with regard to claim 9, a plurality of fine reducers are connected downstream of the pre-classifying system according to claim 1. How is multi-stage classifying means arranged downstream with respect to the pre-classifying system?

With regard to claim 8, post-processing devices is indefinite because Applicant fails to particularly point out the invention.

With regard to claim 8, what is upstream of the post-processing devices?

### ***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1, 3, 4, 8, and 9, as well as can be understood, are rejected under 35 U.S.C. 103(a) as being unpatentable over Bonnet (US 5,368,240) in view of Smith (US 4,113,186), Quinn (US 3,622,089), Ellers et al. (US 5,524,838), Memon (US 5,927,620), and Schorsch et al. (US 4,084,387).

With regard to claims 1, 3, 4, and 8, Bonnet discloses substantially all of the claimed structure including:

1. a pre-reduction system (15);
2. a multi-stage freeze system (11 and 12) including a first pre-freeze tunnel system (11) and a first main freeze tunnel (12); and

3. a fine reduction system (46).

Bonnet does not recite that his pre-reduction system is multi-stage. In a closely related art, Smith discloses a tire grinding system with a multi-stage pre-reduction system (column 2, lines 3-7) in order to improve pre-reduction of tire material. Therefore, it would have been obvious to one skilled in the art at the time the invention was made to provide Bonnet with a multi-stage pre-reduction system in order to improve pre-reduction of tire material, as taught by Smith.

Bonnet also does not recite that his fine reducer is a plurality of fine reducers. In a closely related art pertinent to the problem, Quinn disclose a plurality of fine reducers (171 and 172 – Quinn) arranged in parallel with a pre-classifying system in order to further reduce material into two different sizes. Therefore, it would have been obvious to one skilled in the art at the time the invention was made to provide Bonnet with a plurality of fine reducers arranged in parallel with a pre-classifying system in order to further reduce material into two different sizes, as taught by Quinn.

With regard to a metal separator downstream of the fine reducers, in a closely related art, Ellers discloses a metal separator (16) downstream of a fine reducer (13) in order to separate metal. Ellers also discloses a discharge unit (18) connected downstream of the metal separator (16). Therefore, it would have been obvious to one skilled in the art at the time the invention was made to provide Bonnet with a metal separator downstream of a fine reducer in order to separate metal, as taught by Ellers.

With regard to the heating and drying means for processing rubber fragments, Memon discloses a heating (16) and drying means (18) in order to produce rubber

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product from recycling tires. Therefore, it would have been obvious to one skilled in the art at the time the invention was made to provide Bonnet with a heating and drying means in order to produce rubber product from recycling tires, as taught by Memon.

With regard to the details of the freezing means, Schorsch discloses:

1. a pre-freeze tunnel (column 5, line 27) injected with cold used refrigerant gas (column 1, line 58);
2. a main freeze tunnel (column 5, line 35) for spraying (column 4, lines 13-16) a low-temperature liquid refrigerant onto the material;
3. a temperature equalizing system (300, 301, 302, 303, 304, and 305);
4. the pre-freeze tunnel (column 5, line 27) and the main freeze tunnel (column 5, line 35) arranged horizontally and in series (Figure 1); and
5. the temperature equalizing system (305) located following the pre-freeze tunnel (column 5, line 27) and the main freeze tunnel (column 5, line 35).

Schorsch discloses the details of these freezing means in order to efficiently freeze material for further reduction. Therefore, it would have been obvious to one skilled in the art at the time the invention was made to provide Bonnet with the details of these freezing means in order to efficiently freeze material for further reduction, as taught by Schorsch.

With regard to claims 3 and 4, Bonnet discloses a second freezing means connected in parallel.

With regard to claim 9, Quinn already discloses a multi-stage classifying means in order to further classify material.

***Allowable Subject Matter***

In view of further consideration and new search, the allowable subject matter recited in the last Office action has been withdrawn. A new rejection has been provided as above.

***Conclusion***

With regard to claims 10 and 11, the patentability of the claims could not be determined at this time because it is not clear how the claimed devices are arranged.


Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jason Y. Pahng whose telephone number is 571 272 4522. The examiner can normally be reached on 9:00 AM - 7:00 PM, Monday-Thursday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Derris Banks can be reached on 571 272 4419. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.



Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

JYP



Lowell A. Larson  
Primary Examiner